Title: **JP10050343A2: FLUORINE-CONTAINING SOLVENT FOR LITHIUM BATTERY WITH HIGH SAFETY**

Country: **JP** Japan
Kind: **A**

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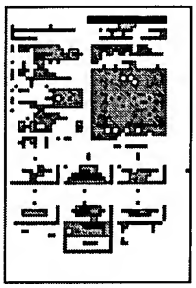

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Assignee: **HOECHST AG**
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Abstract:

PROBLEM TO BE SOLVED: To enhance safety of an electrolyte-containing device and provide an electrolyte solution with viscosity and conductivity capable of being used even at low temperature by using a partially fluorinated aliphatic ether of the specified group as a solvent of an electrolyte system of a lithium secondary battery.

SOLUTION: An effective amount of at least one of partially fluorinated ether represented by formula I and/or at least one of partially fluorinated ether represented by formula II are/is added to an electrolyte system as a fluorine- containing solvent for a lithium battery with high safety. Formula I: RO-[(CH2)m]n-CF2-CFH-X, (R is a straight-chain alkyl group having 1 to 10 carbon atoms or a branched alkyl group having 3 to 10 carbon atoms, X is a perfluoroalkyl group having 1 to 6 carbon atoms allowed it to contain a fluorine atom, chlorine atom, or ether oxygen, m is an integer of 2-6, and n is an integer of l-8.) Formula II: X-CFH-CF2O-[(CH2)mO]n-CF2-CFH-X (X, m, and n are the same as the formula I).

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Family: Show 4 known family members

Forward References:

| PDF | Patent | Pub.Date | Inventor | Assignee | Title |
|---|---|---|---|---|---|
| | US6210835 | 2001-04-03 | Arai; Juichi | Hitachi, Ltd. | Lithium secondary battery and liquid electrolyte for the battery |

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## (54) FLUORINE-CONTAINING SOLVENT FOR LITHIUM BATTERY WITH HIGH SAFETY

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